

## Prelim Bits 05-05-2023 | UPSC Daily Current Affairs

### Scary Barbie

*Scientists discovered a supermassive black hole and have named it 'Scary Barbie,' after a beloved children's character.*

- Scary Barbie is a supermassive black hole that is devouring a star with a thousand times the brightness of a supernova.
- Scary Barbie was first observed in 2020 and it was named [ZTF20abrbeie](#).
- It is one of the most luminous, energetic, long-lasting transient objects in the sky.
- But it is also extremely far away and in a somewhat neglected corner of the sky.
- The researchers discovered it using an AI engine called [REFITT](#) (Recommender Engine For Intelligent Transient Tracking).
- The AI engine looks through observations from many different telescopes around the world.

**Spaghettification** - It is a process in which the forces around a black hole, called [tidal disruption](#), pull other objects apart.

### References

1. [IE - Meet Scary Barbie: A supermassive black hole](#)
2. [Futurity - Meet 'Scary Barbie,' a black hole tearing apart a giant star](#)

### Ekatha Harbour

*Defence Minister of India and his Maldivian counterpart laid the foundation stone for the Coast Guard 'Ekatha Harbour'.*

- 'Ekatha Harbour' is a harbour for the Coast Guard of the Maldives National Defence Force (MNDF).
- It is located at Sifavaru in Uthuru Thila Falhu (UTF) atoll.
- The [UTF Harbour Project](#) is among the biggest Indian grant-in-aid projects in Maldives.
- At UTF atoll India is assisting in construction of a naval dockyard.
- India recently gifted a fast patrol vessel to Maldives Coast Guard and the ship was commissioned as **CGS Huravee**.
- These were in line with India's vision of Security and Growth for All in the Region (SAGAR).
- **India-Maldives** - Maldives is among India's key maritime neighbours in the Indian Ocean Region.

- In 2021, an Action Plan on Defence Cooperation between Maldives and India was signed.
- In 2020, India had gifted a Dornier aircraft to Maldives and in 2019 handed over a patrol vessel.
- In 2022, India had also given a coastal radar system to Male.

## References

1. [IE - Delhi-assisted harbour construction launched at Sifavaru](#)
2. [The Hindu - India to build Harbour for Maldivian Coast Guard](#)

## Zoonomia Project

*The ambitious genome project, Zoonomia, shows how humans fit with other mammals.*

- The Zoonomia Project is an international collaboration to discover the genomic basis of shared and specialized traits in mammals.
- A team of scientists from Uppsala University and Broad Institute started the project in 2015 and later joined by researchers across the world.
- Zoonomia project compares the genomes of 240 mammal species as well as people to trace evolutionary changes spanning 100 million years.
- It aims at pinpointing genetic traits widely shared and those more uniquely human.
- **Key Findings** - The project identified parts of the genome functionally important in people and other mammals.
- It showed how certain mutations can cause disease.
- The project revealed the genetics of uncommon mammalian traits like hibernation and showed how the sense of smell varies widely.
- Some mammals have a very keen sense of smell like the African savanna elephant while others have almost none like whales and dolphins.
- Humans have average sense of smell.

## References

1. [IE - Zoonomia project shows how humans fit with other mammals](#)
2. [Nature - Zoonomia project offers fresh insights on human evolution](#)
3. [Zoonomia Project](#)

## Petersberg Climate Dialogue

*The two-day meeting recently held in Berlin is a key negotiating step in the run-up to the 2023 international climate conference COP 28 in Dubai.*

- The Petersberg Climate Dialogue (PCD) is an annual high-level political and international forum that takes place ahead of the annual United Nations Climate Change Conferences (COP).
- The 14<sup>th</sup> Petersberg Dialogue on Climate Change was held in Berlin, Germany.
- It was hosted by Germany and the United Arab Emirates, the incoming COP-28 Presidency.
- Delegates from 40 countries attended this year's high-level dialogue series including

Indian Union Minister for Environment, Forest and Climate Change.

*The next Climate Change Conference COP28 will take place in Dubai in the United Arab Emirates from 30 November to 12 December 2023.*

- COP28 President-Designate Sultan Ahmed Al Jaber called on meeting participants to ramp up renewable energy capacity building.
- He called for a tripling of renewable energy capacity by 2030 followed by a doubling in 2040, but his address focused on reducing fossil fuel 'emissions'.

#### **Petersberg Climate Dialogue**

- The first Petersberg Climate Dialogue took place in 2010 at Petersberg hill near Bonn city, where the UNFCCC is headquartered.
- In subsequent years, the Petersberg Climate Dialogue conference was held in Berlin.
- Initiated by former German Chancellor Angela Merkel after unsuccessful negotiations at the 2009 United Nations Climate Change Conference in Copenhagen (COP15)
- It is aimed at improving communication between leaders and environmental ministers.

- **Global Stocktake** - It is a periodic review of global climate action which aims to assess whether current efforts will enable us to reach the objectives set out in the Paris Agreement.
- 2023 is the year for the Global Stocktake and also the first Global Stocktake year since the Paris Agreement was signed in 2015.
- The report is set to be released in September of 2023.

#### **References**

1. [DTE - Some key takeaways from the Petersberg Climate Dialogue](#)
2. [UNRIC - Petersberg Climate Dialogue 2023](#)

#### **Chinnar Wildlife Sanctuary**

*The tribal settlements in Chinnar Wildlife Sanctuary are reviving cultivation of millets and endemic crops through Punarjeevanam scheme.*

- Chinnar Wildlife Sanctuary in Idukki district of Kerala and comes under Munnar Wildlife Division.
- Chinnar Wildlife Sanctuary is home to the [Great Grizzled Squirrel](#) of India.
- There are 11 tribal settlements comprising Muduvan and Hill Pulaya communities under the Wildlife Division.
- **Punarjeevanam** (revival or resurrection) scheme was launched in 2016 by Kerala Forest and Wildlife Department.
- The scheme was launched to revive farming of millets and endemic crops in the tribal settlements under Chinnar Wildlife Sanctuary.
- It has revived 34 varieties of ragi, in addition to multiple kinds of beans, millets,

amaranthus, maize and pumpkin.

## References

1. [The Hindu - Punarjeevanam scheme in Chinnar Wildlife Sanctuary](#)
2. [Kerala Tourism - Chinnar Wildlife Sanctuary](#)

